

## CLAIMS

1 - Electrically controllable device having variable optical/energy  
5 properties in transmission or in reflection, comprising at least one carrier  
substrate provided with a stack of electrochromically functional layers, including  
at least two electrochromic active layers, separated by an electrolyte, the said  
stack being placed between two current leads, namely the lower current lead  
and the upper current lead respectively ("lower" corresponding to the current  
10 lead closest to the carrier substrate, as opposed to the "upper" current lead that  
is furthest from the said substrate), characterized in that the stack of functional  
layers is joined to at least one polymer film, the percentage shrinkage of which  
is between 0.6 and 2.0% and preferably between 0.8 and 1.5%.

2 - Device according to Claim 1, characterized in that the polymer film is  
15 a birefringent dielectric multilayer film suitable for reflecting at least 50% of the  
light within a spectral band of at least 100 nm in width.

3 - Device according to either of the preceding claims, characterized in  
that it constitutes a vehicle sunroof, which can be actuated autonomously, or a  
vehicle side window or rear window.

20 4 - Device according to one of Claims 1 to 3, characterized in that it  
constitutes a windscreen or portion of a windscreen.

5 - Device according to Claim 4, characterized in that the windscreen  
has a complexity value  $F$  of between 0.00215 and 0.00240 and preferably  
between 0.00219 and 0.00230.

25 6. Device according to one of the preceding claims, characterized in that  
the device is located in the top part of the windscreen, especially in the form of  
one or more bands along the outline of the windscreen.

7. Device according to one of the preceding claims, characterized in that  
the device is located in the central part of the windscreen, especially in order to  
30 prevent a driver being dazzled at night, with the aid of automated control of its  
power supply using at least one camera and/or at least one light sensor.

8. Device according to one of Claims 1 to 7, characterized in that it

constitutes a graphical and/or alphanumeric data display panel, glazing for buildings, a rearview mirror, an aircraft cabin window or windscreen, or a skylight.

5 9. Device according to one of Claims 1 to 8, characterized in that it constitutes:

- interior or exterior glazing for buildings;
- a shop showcase or countertop, which may be curved;
- glazing for the protection of an object of the painting type;
- a computer antidazzle screen;
- 10 - glass furniture.

10. Device according to one of the preceding claims, characterized in that it operates in transmission or in reflection.

15 11. Device according to one of the preceding claims, characterized in that it includes at least one transparent, plain or curved, clear or bulk-tinted substrate, polygonal in shape or at least partly curved.

12. Device according to one of the preceding claims, characterized in that it includes an opaque or opacified substrate.

20 13. Device according to any one of the preceding claims, characterized in that the electronic conductivity of at least one of the active layers is sufficient for replacing the conducting layers with a grid of wires.

14. Device according to any one of the preceding claims, characterized in that the conducting wires increase the conductivity of the active layers, in order to guarantee colouration uniformity.

25 15. Device according to any one of the preceding claims, characterized in that it incorporates another functionality.